The Shifts required by the Common Core State Standards for Mathematics are[1]:

1. **Focus:** Focus strongly where the Standards focus.
2. **Coherence:** Think across grades, and link to major topics within grades.
3. **Rigor:** In major topics pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

This guide provides concrete examples of what the Common Core State Standards for Mathematics in grades K-8 look like in daily instructional planning and practice. It is designed as a developmental tool for teachers and those who support teachers.

Date: _____ ***Teacher:*** _____ ***Class:*** _____ ***Unit or Lesson:*** _____ ***Standards Addressed:*** _____

Use this tool to observe a lesson and provide feedback or to guide lesson planning and reflection. When observing a portion of a lesson, some expectations may be appropriately left blank. For all uses, refer to the CCSS Standards for Mathematics (corestandards.org/math) and the grade-level content emphases (achievethecore.org/emphases).

EXPECTATION	EVIDENCE OBSERVED OR GATHERED				
1. The work of the lesson focuses on the Common Core State Standards.	*These expectations should be evident in planning and observable in instruction. Sample artifacts and observables include: lesson plan, teacher instruction, problems and exercises, and tasks and assessments.*				
A. The lesson focuses on grade-level cluster(s), grade-level content standard(s) or part(s) thereof.	Select 1-4 below based on evidence recorded, where a 2 or 3 indicates progress between the descriptions provided.				
	1	2	3	4	*Notes:*
	The lesson focuses only on mathematics outside the grade-level standards.	←	→	The lesson focuses only on mathematics within the grade-level standards.	
B. The lesson reflects the full intent of the grade-level cluster(s), grade-level content standard(s) or part(s) thereof being addressed.	1	2	3	4	
	The lesson superficially or only partially reflects the standard(s) being addressed.	←	→	The lesson fully reflects all aspects of the standard(s) being addressed.	
C. The lesson relates new concepts explicitly to students' prior skills and knowledge.	1	2	3	4	
	No connections are made to students' prior skills and knowledge.	←	→	The lesson intentionally builds on students' prior skills and knowledge and students articulate these connections.	
D. The lesson intentionally targets the aspect(s) of rigor (conceptual understanding, procedural skill and fluency, application) called for by the standard(s) being addressed.	1	2	3	4	*Note the aspect(s) of rigor targeted in this lesson:*
	The lesson targets aspect(s) of rigor that is/are inappropriate for the standard(s) being addressed.	←	→	The lesson explicitly targets aspect(s) of rigor called for by the standard(s) being addressed.	conceptual understanding; procedural skill and fluency; application

[1] Refer to *Common Core Shifts at a Glance* (achievethecore.org/mathshifts) and the *K-8 Publishers' Criteria for the Common Core State Standards for Mathematics* (achievethecore.org/publisherscriteria) for additional information about the Shifts required by the CCSS.

EXPECTATION	EVIDENCE OBSERVED OR GATHERED				
2. Instructional practices maximize opportunities for all students to master the content of the lesson.	*Sample artifacts or observables include: teacher instruction, problems and exercises, tasks and assessments, student discussion and behavior, and student work.*				
A. The teacher uses explanation, modeling, representations, and/or examples to make the mathematics of the lesson explicit.	Select 1-4 below based on evidence recorded, where a 2 or 3 indicates progress between the descriptions provided.				*Notes:*
	1	2	3	4	
	Teacher instruction is limited to showing how to get the answer.	←	→	Teacher instruction goes beyond showing how to get the answer.	
B. The teacher poses high quality questions and problems that prompt students to share their developing thinking about the content of the lesson.	1	2	3	4	
	Questions and problems do not prompt students to share their developing thinking.	←	→	Questions and problems prompt students to share their developing thinking.	
C. The teacher provides students time to work with and practice grade-level problems and exercises.	1	2	3	4	
	Students are given limited time to work with grade-level problems and exercises.	←	→	Students are given extensive opportunity to work with grade-level problems and exercises.	
D. The teacher uses variation in students' solution methods to strengthen other students' understanding of the content.	1	2	3	4	
	A single solution method is provided and discussed.	←	→	A variety of student solution methods are shared and examined together to support understanding.	
E. The teacher checks for understanding throughout the lesson, using informal, but deliberate methods (such as questioning or assigning short problems).	1	2	3	4	
	There are few or no checks for understanding or understanding of only a few students is assessed.	←	→	Checks for understanding are used throughout the lesson to assess progress of all students.	
F. The teacher guides student thinking toward the focus of the lesson and summarizes the mathematics with references to student work and discussion.	1	2	3	4	
	The lesson concludes with no summary of its focus.	←	→	The mathematics of the lesson is summarized with reference to student work and discussion.	

EXPECTATION	ILLUSTRATIVE STUDENT BEHAVIOR	EVIDENCE OBSERVED OR GATHERED				
3. The teacher provides all students with opportunities to engage in the work of the lesson and exhibit mathematical practices.	**All students are productively engaged in the work of the lesson and exhibiting mathematical practices[2].**	*Some or most of the expectations should be observable in every lesson, though not all will be evident in all lessons. Sample artifacts or observables include: student discussion and behavior and student work.*				
A. The teacher uses strategies to keep all students persevering with challenging problems.	Even after reaching a point of frustration, students persist in efforts to solve challenging problems.	See below for scale (if not observable leave blank) 1	2	3	4	*Notes:*
B. The teacher establishes a classroom culture in which students explain their thinking.	Students elaborate with a second sentence (spontaneously or prompted by the teacher or another student) to explain their thinking and connect it to their first sentence.	1	2	3	4	
C. The teacher orchestrates conversations in which students talk about each other's thinking.	Students talk about and ask questions about each other's thinking, in order to clarify or improve their own mathematical understanding.	1	2	3	4	
D. The teacher connects students' informal language to precise mathematical language appropriate to their grade.	Students use precise mathematical language in their explanations and discussions.	1	2	3	4	
E. The teacher has established a classroom culture in which students choose and use appropriate tools when solving a problem.	Students use appropriate tools strategically when solving a problem.	1	2	3	4	
F. The teacher asks students to explain and justify work and provides feedback that helps students revise initial work.	Student work includes revisions, especially revised explanations and justifications.	1	2	3	4	

1	2	3	4
The teacher does not provide students opportunity and very few students demonstrate this behavior.	The teacher provides students opportunity inconsistently or very few students demonstrate this behavior.	The teacher provides students opportunity consistently and some students demonstrate this behavior.	The teacher provides students opportunity consistently and all students demonstrate this behavior.

[2] Some portions adapted from 'Looking for Standards in the Mathematics Classroom' 5x8 card published by the Strategic Education Research Partnership (math.serpmedia.org/tools_5x8.html)

This tool is for use by teachers, those providing support to teachers, and others working to implement the CCSS for Mathematics – it is not designed for use in evaluation. The *CCSS Evidence Guide for Planning and Practice in a Single Lesson* is intended for use in conjunction with the *CCSS Evidence Guide for Planning and Practice Over the Course of the Year.* Both tools are available at achievethecore.org/instructional-practice.